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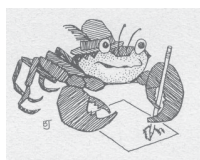
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Shore Enough — The Manager Speaks

by Ted Diers, NHCP Manager

“Ch-ch-ch-ch-Changes,” croons the refrain of the David Bowie song, “Changes,” and is an appropriate theme for the NHCP over the last year. This edition of *Tidelines* is dedicated to catching our readers up on program happenings.



In July 2004, as a result of legislative action, the NHCP made the organizational move from the Office of Energy and Planning (formerly the Office of State Planning) to DES, which incorporated NHCP into its Watershed Management Bureau. Then in September, after more than 20 years at our downtown Portsmouth location, we physically moved to offices at the Pease Tradeport. Please note our new mailing address, phone number and e-mail.

Staff changes include the retirement of our long-time manager Dave Hartman in October 2003 after 28 years of state service, and who has since been seen hawking “Hartman’s Bee Good Honey” at a farm stand in Warner. In January 2004, Verna DeLauer, outreach coordinator, took a position with the Student Conservation Association, and in October 2004, Brian Mazerski, coastal consistency coordinator, took a job with the Department of Defense. We are in the process of filling these positions. I was promoted to program manager in September. I am also pleased to announce the hiring of Lindsay Anderson, National Oceanic and Atmospheric Administration (NOAA) fellow, whose work is enhancing the Groundwater Availability project, and Cathy Coletti, who is managing the production of *Tidelines* among other duties.

Another important change is the expansion of our coastal zone boundary. As of January 2004, our boundary now covers the 17 tidal communities in their entirety.

Despite our transitions over the past year, the program is making progress on many fronts and will continue to provide support to those working so hard to conserve coastal resources.

Starting in early 2005, a bi-monthly electronic mini-version of this newsletter will be made available to provide the most up-to-date and timely information on grant availability, events, workshops, and new publications. These updates can be directly e-mailed to you and will be available on our website. Please contact Cathy Coletti to be put on the list.

Now is the time to aggressively address coastal management issues in ways that balance the resource and infrastructure needs of coastal communities and ecosystems. In this effort, we have true champions in our congressional delegation lead by our senior senator Judd Gregg. We also have a truly regional focus through the Gulf of Maine Council and our interactions with NOAA. I encourage you to contact us to find out how we can support your efforts to improve and conserve your corner of the coast and the watershed that feeds it.

Bellamy River Habitat Restored

In early November, the head-of-the-tide Bellamy River Dam in Dover was removed through a cooperative public-private effort. The \$35,000 project was funded by private businesses, governmental agencies, and non-profits, including the [NHCP](#), [Coastal Conservation Association](#), [Corporate Wetlands Restoration Partnership \(CWRP\)](#), [New Hampshire Fish and Game](#), and the [National Oceanic and Atmospheric Administration \(NOAA\)](#). CWRP facilitated the corporate support for the project. DES staff coordinated the permitting process and onsite removal operations.

Spanning a width of 60 feet, this 19th century timber crib dam was a formidable blockade to spawning fish species, especially rainbow smelt and river herring. Originally the dam stood at ten feet high, but had collapsed to about three feet high.

Without access to fresh water spawning habitats, fish populations on the Bellamy River have suffered in the last few decades. Prior to the dam's removal, the Bellamy River system was the only major river system within the Great Bay Estuary that did not allow fish movement past the head of the tide.



Bellamy River Dam as it appeared in 1935.



At right: Water now flows freely on the Bellamy River.

No Discharge Proposal

In early 2005, the DES Watershed Management Bureau plans to submit an application to the US Environmental Protection Agency (EPA) to designate all New Hampshire coastal waters as a "No Discharge Area" for boat sewage. Under the current law, boats with a holding tank can remove their wastes at an approved discharge site or travel beyond the three-mile limit. Boats that contain treatment systems for sewage wastes are allowed to discharge within the three-mile state boundary.



However, with a "No Discharge Area" designation, all boats would be prohibited from discharging within the three-mile limit.

Both human health and coastal environments are threat-

ened by disease carrying bacteria and viruses that enter the water when boats directly discharge sewage.

The [EPA](#) will conduct a series of reviews and request public comment. Please visit www.des.nh.gov/wmb/cva/nodischarge.htm for more information or contact Alicia Carlson at (603) 271-0698 or acarlson@des.state.nh.us.

Spotlight on Projects



Groundwater Availability

The goal of the Seacoast groundwater availability project is to better understand water storage and movement in and between surface and groundwater systems in New Hampshire's seacoast watershed. To meet this goal, NHCP, US Geological Survey, and the New Hampshire Geological Survey are working together on a three-year project. Recent accomplishments include digital, seamless surficial geology data (which will soon be available on GRANIT), over 10,000 entries in a new groundwater database, and a successful collection of water use data from local middle schools that will support town water use models. Over the next year, these and other data will be integrated into tools to help local communities make better-informed decisions about water planning.

If you would like more detailed information about these projects, please contact:

Lindsay Anderson or visit

www.nh.water.usgs.gov/CurrentProjects/seacoast/index.htm

Nonpoint Source Pollution

The Coastal Nonpoint Pollution Control Program (CNPCP) requires that all states with approved coastal management programs implement nonpoint source programs (NPS) that contain Management Measures to reduce polluted runoff. New Hampshire's CNPCP tracks and implements NPS Management Measures in seven general areas: agriculture, forestry, urban areas, onsite disposal systems, roads and bridges, marinas and recreational boating, and hyrdo-modification.

Since 2001, New Hampshire's CNPCP Implementation Grant program has awarded NPS grants to local stakeholders. Grant-funded projects include NPS education, research, technical assistance, and land use planning. Budget cuts at the federal level for 2005 will decrease funding for NPS implementation grants for the new year; however, the CNPCP will still work to reduce NPS. Activities will include the coordination of state and local organizations on nonpoint source

pollution control measures, technical assistance, public education, and long-term water quality monitoring.

For more information about New Hampshire's CNPCP, please contact Sally Soule.

Restoration

The Restoration Program partners with municipalities, regional planning commissions, non-profits, and others to develop and complete coastal wetland protection and restoration projects. The program also offers ongoing grants to fund projects.

Recent accomplishments include: digital orthophotography for the seacoast, Bellamy River dam removal, feasibility studies on the Winnicut and Gonic dams, and completion of the Awcomin marsh restoration where a trail and viewing platforms are now under construction.

This Spring, two more projects will be completed. The Odriorne Boat Launch marsh project with reclaim filled marsh and create a boardwalk to the state park. The Browns River marsh project will restore 42 acres of tidally restricted marsh in Seabrook.

Our successful partnership with Ducks Unlimited to monitor salt marsh restoration will enter its third year this coming summer. If you are interested in becoming a volunteer Marsh Monitor or getting more information on restoration projects, contact Jen Drociak or visit www.des.state.nh.us/coastal/restoration.

Competitive Grant Program

During the last competitive grant round, NHCP funded 12 applications. The Rockingham Planning Commission received \$32,026 to provide technical planning assistance to six member coastal communities, and Strafford Regional Planning Commission was granted \$50,000 to support technical planning assistance in its five member coastal communities. Other grants awarded included: Blue Ocean Society (\$45,191), Cocheco

River Watershed Coalition (\$3,050), Fish and Game Dept. (\$18,030), Great Bay Coast Watch (\$50,000), Ducks Unlimited (\$16,706), Gulf of Maine Association (\$20,000), UNH Center for Integrative Regional Problem Solving (\$24,482), City of Dover (\$32,000), Conservation Land Stewardship Program (\$5,000), and the Town of Newmarket (\$50,000). For more information contact Dave Murphy or visit www.des.state.nh.us/coastal/grants.

Browns River Salt Marsh Protected

For the last 200 years, humans have been putting up obstructions to tidal flow into salt marshes and tidal rivers. Roads, railways and berms often cut off or restrict flow to these important wetlands. Browns River salt marsh in Seabrook and Hampton Falls, located adjacent to Seabrook Station, is bisected by a railroad causeway built across the marsh in the 1850s. All tidal flow to the 42-acre marsh passes through a relatively small culvert. The marsh is beginning to show signs of the degradation associated with tidal restrictions.

In order to restore and protect the 42-acre Browns River salt marsh from future degradation, the DES recently signed an agreement with FPL Energy Seabrook Station to move forward with the restoration project. The NHCP, which recently became part of DES, is partnering with Seabrook Station, the town of Seabrook, the Natural Resources Conservation Service, U.S. Fish and Wildlife Service, National Oceanic and Atmospheric Administration, and N.H. Department of Transportation to restore greater tidal flow to the impacted area. This will be accomplished by installing a new box culvert, which will increase tidal flow more than fourfold.

Final engineering and design for the restoration is underway. Construction should commence this spring and be completed by next summer. Contact Jen Drociak, (603) 559-0028, for more information.

Gulf of Maine Council Corner

The Gulf of Maine Council on the Marine Environment is a U.S.-Canadian partnership of government and non-government organizations in New Hampshire, Massachusetts, Maine, New Brunswick and Nova Scotia that are working to maintain and enhance environmental quality in the Gulf of Maine.

The Gulf of Maine Summit, held from October 26-29, 2004 in St. Andrews, New Brunswick, brought together coastal experts, concerned citizens, businesses, and leaders from around the Gulf of Maine to celebrate 15 years of partnerships, assess current environmental conditions, and develop plans for future actions needed to continue improving the environmental quality of the Gulf.

DES Commissioner Michael Nolin took the helm as chair of the Gulf of Maine Council at its June 24, 2004 meeting, marking the end of Nova Scotia's one-year term and the beginning of New Hampshire's Secretariat year. The Secretariat jurisdiction is responsible for convening meetings and maintaining the Council's daily operations. New Hampshire hosted the Working Group and Council meetings in December. In addition, on December 8, 2004, an ocean governance forum looking at potential roles for the Council in implementing the U.S. Ocean Commissions report, *Ocean Blueprint for the 21st Century*, was held in Portsmouth.

For more information please visit www.gulfofmaine.org.



The Honorable Kerry Morash (left) passes the Gulf of Maine Council stone gavel to DES Commissioner Mike Nolin.

Meet the Staff!

Ted Diers was promoted to Program Manager in September 2004 and is responsible for the coordination of the NHCP as



one of the nation's 34 coastal zone management programs. From December 1996 until September 2004, Ted was

the Enhancement Grant Program coordinator, focusing his work on habitat restoration, wetlands policy, sprawl issues and the groundwater availability project. Ted holds a master's degree from the Yale School of Forestry and Environmental Studies.

Lindsay Anderson is a two-year NOAA Fellow working on the Seacoast Groundwater Availability Project. She serves



as a liaison between the N.H. Geological Survey, USGS, and coastal communities to help address

issues related to ground water supplies. She holds a master's degree in both geology and water resources management from the University of Wisconsin in Madison.

Cathy Coletti joined NHCP in November as part-time junior planner. Cathy's role will include managing the production of *Tidelines*, developing web content and assisting other program staff. Past jobs include a two-year stint with the Central



environmental conservation with a concentration in journalism from the University of New Hampshire.

Jen Drociak is the restoration specialist. Since joining NHCP in January of 2002, Jen has coordinated biological and water quality monitoring of salt marshes on the coast and Great Bay and co-coordinates the Marsh Monitors Volunteer Salt Marsh



Monitoring Program (with Ducks Unlimited). Jen organizes the data collection, entry, and analysis for the program. Jen has also worked for several other programs in the Watershed Management Bureau at DES. She holds a bachelor of science degree in environmental science from the University of New Hampshire.

As Grants Coordinator, **Dave Murphy** oversees the annual competitive grant process. He provides technical assistance



to applicants, reviews applications, and negotiates project details after grants are awarded. Dave worked

with NHCP from 1987 to 1992, then went on to work in the state's Community Development Block Grants Program, and has been back with NHCP for the past four and a half years. Dave is a graduate of Indiana University.

Mary Power has been with NHCP for 24 years. As executive secretary at the Pease Tradeport



office, she acts as receptionist and support staff for NHCP and other DES personnel. She participates in the Dredge

Management Task Force and Estuaries Project Management Committee, and organizes the annual Coastal Cleanup and other public outreach activities.

Sally Soule is the Coastal Nonpoint Source Pollution Control Program Coordinator. Her role includes the development and administration of grant



funded projects that reduce and prevent nonpoint pollution. Projects range from helping municipalities

modify local ordinances to pollution source identification. In prior job roles, Sally worked with the New Hampshire Estuaries Project and was the education director at the Nashua River Watershed Association for six years.

Beyond Our Coast



Ocean Blueprint for the 21st Century

The U.S. Commission on Ocean Policy released the *Ocean Blueprint for the 21st Century* on September 20, 2004. The report outlined a vision for improving ocean management. To download a copy visit www.oceancommission.gov.

Observed Impacts of Global Climate Change in the U.S.

Global climate change is already having discernible effects on plant and animal species in the U.S. and is likely to be a significant driver of ecosystem fluctuations in the next century, according to a new report by the nonpartisan Pew Center on Global Climate Change. Previous research has linked global ecological shifts to warming temperatures and altered precipitation patterns, but this is the first to focus specifically on the U.S. Visit the Pew Center on Global Climate Change at www.pewclimate.org to download the report.

Ocean Future Roundtable Report

The National Ocean Service has issued the *Ocean Future Roundtables* final report. From December 2003 through July 2004, NOAA's National Ocean Service sponsored a series of seven constituent roundtables. The roundtable discusses raising public understanding of the role of the ocean in sustaining the nation's economy and environment. To download the report, visit oceanservice.noaa.gov/roundtables/welcome.html

NHCP Grant Programs

Competitive Grants are available for natural resource management, research, education, construction, and acquisition projects. Coastal municipalities, state agencies, departments within higher education, non-profit groups, and the Strafford and Rockingham Regional Planning Commissions are all eligible. Grants focus on 17 towns within the coastal zone: Dover, Durham, Exeter, Greenland, Hampton, Hampton Falls, Madbury, New Castle, Newfields, Newington, Newmarket, North Hampton, Portsmouth, Rollinsford, Rye, Seabrook and Stratham.

Projects outside this area may be considered if a direct impact on the coastal zone, such as nonpoint source pollution prevention, is demonstrated. **Applications are due February 14, 2005.**



Restoration Grants are available for river and tidal wetland restoration projects. Applications are accepted at any time or through the competitive grant program.

For more information contact Dave Murphy at (603) 559-0021, e-mail dmurphy@des.state.nh.us or visit www.des.nh.gov/coastal/grants to download an application.



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To read *Tidelines* online with links to other information and expanded articles, visit the NHCP website at www.des.nh.gov/coastal/resources or go to the DES publications webpage at www.des.nh.gov/news-bulletins.htm. Coming soon to an inbox near you, NHCP will deliver a bi-monthly electronic newsletter to provide the most up-to-date and timely information on grant availability, events, workshops, and new publications. We will use our existing e-mail list to send out the first edition.



Press Conference for Bellamy River Dam Removal Project

On November 9, 2004, a floating press conference was held on the Bellamy River to unveil the dam removal project and celebrate the opening of fish passage. Attendees included Congressman Jeb Bradley, CWRP Chairman Ronald B. Laurence, U.S. Environmental Protection Agency Wetlands and Information Branch Chief Carl Deloi, NOAA Director Rollie Schmitten, U.S. Fish and Wildlife Supervisor Michael Bartlett, N.H. Fish and Game Assistant Director Daniel Lynch, DES Assistant Commissioner Michael Walls, Coastal Conservation Association Director Peter Whelan, and Great Bridge Properties owner Chris Davies.

“The Bellamy Mills dam removal and restoration project is an important first step in an effort to restore the fragile ecosystems in one of New Hampshire’s main waterways,” stated First District Congressman Jeb Bradley. “This project is a testament to successful partnership between private companies and federal and state environmental agencies, and truly represents the New Hampshire way of accomplishing projects – through collaboration and innovation.”

See full article on page 3.

Update on Newmarket’s Lamprey Riverwalk Project

The town of Newmarket will use its \$50,000 grant reward to continue work on the Lamprey Riverwalk Project. Phase One of the project, which was funded by the NHCP in 2003, involved construction of approximately 435 linear feet of brick pathway from the town’s boat landing through the existing town park to the town dock. Installation of benches, lighting, picnic tables and plantings/flowerbeds along the walkway was completed during the 2004 construction season. The repair and repaving of the town’s boat ramp and the removal of sediment that had accumulated at the base of the ramp was also completed.

Phase Two of the Riverwalk Project will extend the Phase One walkway. The Riverwalk will run along the 165-foot river frontage of a private, mixed-use development. The town is currently negotiating with the landowner for the donation of an easement along this frontage. The private owner will finance the construction of a seawall along the property frontage, which is not only necessary for the private development, but is an integral part of the Riverwalk project. All Phase Two project activity will take place within the easement area. Work will include the construction of the walkway, linking it to the end of the Phase One walkway, newly landscaped grounds and plantings, and signage that identifies the public walkway and recognizes the funding partners.

See more other project summaries on pages 4-5.

Pew Center Report on Global Warming

Global warming may seem appealing in the dead of winter, but the shift in temperature change is already having effects on the geographic distribution of animals and plants in

the U.S., according to the November 2004 report released by the Pew Center on Global Climate Change. Some plant and animal populations are moving northward and upward in elevation in response to changing temperatures. According to the Gulf of Maine Council on the Marine Environment, marine fish like winter flounder, haddock, halibut, and Atlantic cod are in danger as warmer air and warmer temperatures degrade their native habitats and push their ranges northward.

Earlier flowering and breeding by plants and animals in the U.S. has also been documented, according to the Pew Center report. This trend changes the way some interdependent species interact with each other, including predator-prey relationships.

Future Outcomes

Climate change models indicate that over the next hundred years Earth's temperatures will increase between 2.5° F and 10.4° F from 1990 levels. That's a big difference, considering that if Boston was ten degrees hotter it would have a similar climate to Atlanta, Ga.

Projections on what might happen on the New England coast vary. Melting arctic sea ice could weaken or shift the Gulf Stream, which carries warm water northward from the tropics, and actually lead to a period of longer and more severe winters in the Gulf of Maine region in the coming decades.

Rising sea levels could shrink estuarine habitat. The mixing of salt and fresh water — what defines an estuary — could also be affected by increased or decreased precipitation through a change in the frequency and intensity of storms.

Only one thing is for sure — New England along with the U.S. and the globe will be living the questions on the potential impacts of global climate change in the century to come.

See more on "Beyond Our Coast" on page 7.